



PATENT  
Customer No. 22,852  
Attorney Docket No. 09179.0001-01

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
)  
Byron Scott DERRINGER ) Group Art Unit: 2636  
)  
Application No.: 09/988,376 ) Examiner: John A. Tweel, Jr.  
)  
Filed: November 19, 2001 )  
)  
For: APPARATUS AND METHOD FOR ) Confirmation No.: 8359  
DETECTING OBJECTS LOCATED )  
ON AN AIRPORT RUNWAY )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Applicant respectfully submits this Pre-Appeal Conference Brief in response to the Final Office Action mailed May 4, 2005. Applicant respectfully submits that there are three reasons why the Office should reexamine and reconsider the rejection. First, the references relied upon cannot be combined in the manner asserted. Second, even could they be combined—and they cannot be—the combined references fall short of the claimed invention. Third, the Examiner appears not to have considered the references in relation to the claims, as amended.

**The References Cannot Be Combined in the Manner Asserted**

The Examiner has relied upon six (6) separate references in rejecting the present claims. Were the claimed invention so clearly obvious, it would not require six (6) references to establish that fact. The primary combination of references is: Mehnert;

Byrne; and Jain. No support is supplied for their combination, other than the Examiner's conclusion that it would have been "ideal" to combine them. Applicant's objection to the combination is not, as the Examiner asserts, that the references cannot be "bodily incorporated" into one another (Final Office Action at 14, ll. 3), rather, the references are fundamentally inconsistent with one another, which precludes their combination.

For example, Mehnert expressly distinguishes his invention from prior known detection systems that are located at the "periphery of the monitored terrain" ('332 Patent, Col. 1, ll. 19-28), noting that such systems are plagued by serious problems (Col. 1, ll. 30-59). Mehnert overcomes these serious problems by using a centrally-located, phased, pulsed, polar, directional beam to sweep the monitored area. Mehnert's transmitter and receiver cannot be located at the periphery of the monitored area. Yet, the Examiner attempts to combine Mehnert with Byrne to locate it there. Byrne, however, is plagued by these very problems mentioned by Mehnert. Mehnert's phased, polar, pulsed, directional beam, which is reflected from the monitored surface, is fundamentally incompatible with the detection of a simple incident beam in Byrne, eviscerating Mehnert's invention.

Nor can either Mehnert or Byrne be combined with Jain. Jain is the only one of the three references that even addresses the same problem as the claimed invention, detecting hazards on an airport runway. Yet, Jain discloses a simple, low cost radar transmitter and receiver co-located at the same position on a peripheral edge of the runway. To attempt to combine it with Mehnert's complex, phased, pulsed, centrally-located, directional beam would eviscerate Jain, or Mehnert, or both.

There is absolutely no support in the record—apart from hindsight reconstruction—to combine Mehnert, Byrne, and/or Jain. The Examiner recognizes that this is essentially what he has done in stating that: “obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning.” Final Office Action at 14, ll. 16-17. Absent a teaching or suggestion of record to support the combination, and there is none of record, the combination has been “gleaned only from the applicant’s disclosure.” *Id.* at l. 19.

**The Improperly Assembled References Fall Short of the Claimed Invention**

Second, even were they combined—and they cannot be—the compiled references fall far short of the claimed invention. The Examiner asserts that the claimed receiver (which is adapted to receive only an incident beam) is met by Mehnert’s receiver. Final Office Action at 2, ll. 12-13. It is not. Mehnert receives only a reflected beam from the monitored surface or area. Nor could Mehnert receive an incident beam as claimed in the present claims. Mehnert’s transmitter and receiver are positioned at the same, central point 2. ‘332 Patent, Col. 5, ll. 1-11.

Independent claim 44 expressly requires “a plurality of **receivers adapted to receive said incident beams** and positioned along a second side of said runway.” Independent Claim 83 expressly requires “a plurality of **receivers adapted to receive said incident beams**, said plurality of receivers being positioned along a second side of said runway.” Independent Claim 95 expressly requires “an array of a plurality of **receivers, each of said receivers being adapted to receive said incident beams**, and disposed along a second side of said airport runway opposite said first side.” Further, Independent Claim 106 expressly requires “**receiving said incident beams** at

said second side of said runway.” In fact, none of Mehnert, Jain, or Bass receives an incident beam. Rather, they each receive reflected beams. Reinert and O’Meara are merely lighting fixtures and contain no receiver.

Although Byrne does receive an incident—as opposed to a reflected—beam, it is only along one peripheral edge of a monitored surface and not across a portion of the surface. Independent Claim 44 expressly requires “wherein each of said plurality of transmitters are adapted to emit said incident beams **across at least a portion of said runway**, and each of said plurality of receivers being configured to receive one of said incident beams . . . .” Independent Claims 83 and 95 require “each of said plurality of receivers [positioned along a second side of said runway] being adapted to **receive said incident beam from any one of said plurality of transmitters** [positioned along a first side of said runway]”, thus covering at least a portion of the monitored runway between the first and second sides, and not its peripheral edge.

Independent Claims 83 and 95 further expressly require a “processor for **detecting a status of said incident beam(s)** . . . .” None of Mehnert, Jain, or Bass includes such a processor. Rather their processors analyze the reflected beam.

**The Examiner Has Not Properly Considered the Claims as Amended**

Finally, it appears to Applicant that the Examiner has not fairly examined the amended claims. Applicant filed his original application *pro se*. The Examiner rejected the original application on numerous grounds and suggested that Applicant retain counsel, which Applicant did. Nonetheless, the die was apparently cast. Upon filing his continuation application, Applicant attempted to address the Examiner’s concerns. Yet,

the Examiner made the unusual and unwarranted comment that the application was but a "slight improvement." March 13, 2003 Office Action at 6, ll. 10.

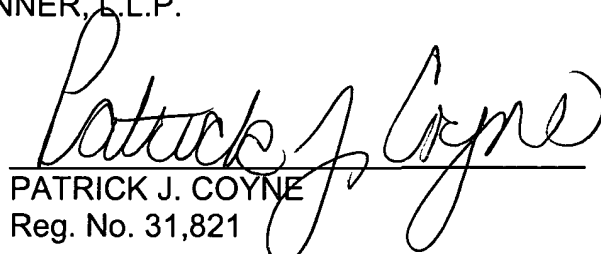
Applicant has repeatedly amended his claims, substantially narrowing them. Yet, the Examiner's rejections have not materially changed to address these amendments. Compare: March 13, 2003 Office Action at 6-16; August 26, 2003 Office Action at 2-16; May 17, 2004 Office Action at 2-13; June 21, 2004 Office Action at 2-12; and May 5, 2004 Office Action at 2-15. In each instance, the Examiner's treatment of the claim limitations directed to receiving an incident beam across at least a portion of the runway—which distinguish each of the references of record—ignores the amendments to the claims.

Respectfully submitted,

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